GenCore version 4.5

OM nucleic - nucleic search, using sw model

Run on: October 21, 2001, 19:52:49 ; Search time 311.46 Seconds
(without alignments)
11138.369 Million cell updates/sec

Title: US-09-515-806-1
Perfect score: 5525
Sequence: 1 tcgccccacgcgtccgcacc.....aatgctttcatatacctgca 5525

Scoring table: OLIGO_NUC
Gapop 60.0 , Gapext 60.0

Searched: 730101 seqs, 313950809 residues

Word size : 0

Total number of hits satisfying chosen parameters: 1460202

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 45 summaries

Database : N_Geneseq_0601:*
1: /SIDS1/gcgdata/geneseq/geneseqn/NA1980.DAT:*
2: /SIDS1/gcgdata/geneseq/geneseqn/NA1981.DAT:*
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22: /SIDS1/gcgdata/geneseq/geneseqn/NA2001.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	5107	92.4	5163	22	AAF44691	Novel protein kina
	2	1985	35.9	2200	21	AAC77790	Human cancer assoc
	3	1585	28.7	2422	21	AAC76970	Human ORFX ORF2525
	4	354	6.4	405	21	AAC77231	Human ORFX ORF2786
c	5	152	2.8	260	21	AAA45838	Human secreted exp
	6	45	0.8	730	21	AAZ97408	Human prostate can
	7	45	0.8	745	21	AAZ97407	Human prostate can
c	8	41	0.7	173	21	AAC25679	Human secreted pro
	9	37	0.7	986	21	AAC79767	Human secreted pro
c	10	36	0.7	182	21	AAC05292	Human secreted pro
	11	36	0.7	1334	21	AAA37105	Human PRO1482 (UNQ
	12	36	0.7	1334	22	AAF54417	Primer #90 used in
c	13	36	0.7	2764	21	AAC59429	Human secreted pro
c	14	36	0.7	5490	21	AAA38099	Human genomic DNA
c	15	36	0.7	7680	21	AAX89439	14-3-3 sigma trans
c	16	36	0.7	14747	22	AAF63406	Human CD39 like pr
c	17	36	0.7	15977	22	AAF63407	Human CD39 like pr
	18	36	0.7	106746	21	AAA10225	Human PCTA-1 genom
c	19	35	0.6	228	21	AAC22904	Human secreted pro
	20	35	0.6	776	21	AAC79016	Human secreted pro
	21	35	0.6	837	20	AAX37525	Human secreted pro
c	22	35	0.6	8639	20	AAX02995	Human IL-1ra BAC c
c	23	35	0.6	41684	21	AAA28150	Human purH gene ge
c	24	34	0.6	152	21	AAC23861	Human secreted pro
c	25	34	0.6	154	21	AAC23164	Human secreted pro
c	26	34	0.6	161	21	AAC22955	Human secreted pro
c	27	34	0.6	161	21	AAC23162	Human secreted pro
c	28	34	0.6	163	21	AAC22526	Human secreted pro
c	29	34	0.6	167	21	AAC23353	Human secreted pro
c	30	34	0.6	177	21	AAC23115	Human secreted pro
c	31	34	0.6	178	21	AAC22569	Human secreted pro
c	32	34	0.6	179	21	AAC22939	Human secreted pro
c	33	34	0.6	180	21	AAC23401	Human secreted pro
c	34	34	0.6	181	21	AAC22805	Human secreted pro
	35	34	0.6	3765	20	AAX79643	Human LKB1 gene fr
c	36	34	0.6	6405	22	AAF97850	Human neuroblastom
	37	33	0.6	249	21	AAC13408	Human secreted pro
c	38	33	0.6	253	21	AAC22429	Human secreted pro
	39	33	0.6	260	21	AAC04921	Human secreted pro
c	40	33	0.6	575	21	AAA81712	N. meningitidis pa
	41	33	0.6	755	20	AAZ16214	Human gene express
c	42	33	0.6	1562	21	AAZ56728	Human transmembran
c	43	33	0.6	1792	21	AAC59834	Human secreted pro
c	44	33	0.6	1902	21	AAC76936	Human ORFX ORF2491
c	45	33	0.6	2309	20	AAZ25332	Human chemokine al

ALIGNMENTS

RESULT 1
AAF44691
ID AAF44691 standard; cDNA; 5163 BP.
XX
AC AAF44691;
XX
DT 27-MAR-2001 (first entry)
XX
DE Novel protein kinase cDNA, SEQ ID NO: 71.
XX
KW Human; mouse; protein kinase; antiarthritic; antisclerotic; osteopathic;
KW immunosuppressive; cardiant; renal; antiinflammatory; antiasthmatic;
KW dermatological; antidiabetic; antiinfertility; gene therapy; vaccine;
KW immune disorder; cardiovascular disease; neurodegenerative disease;
KW cancer; autoimmune disorder; stroke; inflammatory bowel disease;
KW inflammatory pelvic disease; multiple sclerosis; psoriasis; ss.
XX
OS Homo sapiens.
XX
PN WO200073469-A2.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-US14842.
XX
PR 28-MAY-1999; 99US-0136503.
XX
PA (SUGE-) SUGEN INC.
XX
PI Plowman GD, Martinez R, Whyte D, Sudersanam S;
XX
DR WPI; 2001-032161/04.
DR P-PSDB; AAB65663.
XX

PT Nucleic acids encoding kinase polypeptides, useful for diagnosing and
PT treating immune-related diseases and disorders, cardiovascular disease,
PT neurodegenerative diseases and/or cancers -
XX
PS Disclosure; Fig 2; 310pp; English.
XX
CC The present sequence encodes a novel protein kinase. The nucleic acids
CC and the protein kinases they encode may be used in the treatment and
CC diagnosis of diseases associated with inappropriate kinase expression
CC such as immune-related diseases and disorders, cardiovascular disease,
CC neurodegenerative diseases and/or cancers. The nucleic acids and
CC complementary sequences may also be used as DNA probes in diagnostic
CC assays. The kinase polypeptides may be used as antigens in the production
CC of antibodies of kinase expression and activity. Anti-kinase antibodies
CC and kinase antagonists may also be used to down regulate kinase
CC expression and activity. Diseases related to kinase expression and
CC activity include rheumatoid arthritis, atherosclerosis, autoimmune
CC disorders, complications of organ transplantation, myocardial infarction,
CC immune disorders, cardiomyopathies, strokes, renal failure,
CC oxidative-stress related disorders, chronic inflammatory bowel disease,
CC chronic inflammatory pelvic disease, multiple sclerosis, asthma,
CC osteoarthritis, psoriasis, rhinitis, autoimmunity, diabetes, cancers and
CC reproductive disorders.
XX
SQ Sequence 5163 BP; 1490 A; 1177 C; 1283 G; 1213 T; 0 other;

Query Match 92.4%; Score 5107; DB 22; Length 5163;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 5157; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Qy    109 cggagagctacccgcaacgacaggaccacgagctacaggccctggaggccatctacggcg 168
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Qy    169 cggacttccaagacctgcggccggacgcttgcggaccggtcaaagagccccctgaaatca 228
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Qy    229 atttagttttgtaccctcaaggcctaactggtgaagaagtatatgtaaaagtggatttga 288
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Qy    289 gggttaaatgcccacctacctatccagatgtagttcctgaaatagagttaaaaaatgcca 348
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Qy    889 atcagctcatggtgcacaaagggaaatgtattggcagtgatgaacaacttggaaaattag 948
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Qy   1849 ttggtaaaggagcttttggagctgtcatcaaggtgcagaacaagttggacggctgctgct 1908
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Qy   2389 attgcaatgaaaagaatggctgccatgaaagtgagccatcagtgacgactgaggctgtgc 2448
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Qy   2449 actacctatacatccagatggagtactgtgagaagagcactttacgagacaccattgacc 2508
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Qy   2749 gtcacttaactgggatggttggcactgctctctatgtaagcccagaggtccaaggaagca 2808
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Qy   2809 ccaaatctgcatacaaccagaaagtggatctcttcagcctgggaattatcttctttgaga 2868
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Qy   2929 atcccacttcgcctaagtttccagaagactttgacgatggagagcatgcaaagcagaaat 2988
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Db   2946 cagtcatctcctggctgttgaaccacgatccagcaaaacggcccacagccacagagctgc 3005

Qy   3049 tcaagagtgagctgctgccccccaccccagatggaggagtcagagctgcatgaagtgctgc 3108
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3006 tcaagagtgagctgctgccccccaccccagatggaggagtcagagctgcatgaagtgctgc 3065

Qy   3109 accacacgctgaccaacgtggatgggaaggcctaccgcaccatgatggcccagatcttct 3168
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Db   3066 accacacgctgaccaacgtggatgggaaggcctaccgcaccatgatggcccagatcttct 3125

Qy   3169 cgcagcgcatctcccctgccatcgattacacctatgacagcgacatactgaagggcaact 3228
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Qy   3229 tctcaatccgtacagccaagatgcagcagcatgtgtgtgaaaccatcatccgcatcttta 3288
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Qy   3949 aggaggttgttggactgttgaagaaactcggcatcaagttacaggtcttgatcaatttgg 4008
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Db   3906 aggaggttgttggactgttgaagaaactcggcatcaagttacaggtcttgatcaatttgg 3965

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Qy   4309 cccagaaactctggacagcaggcatcacagcagaaatcatgtacgactggtcacagtccc 4368
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Db   4266 cccagaaactctggacagcaggcatcacagcagaaatcatgtacgactggtcacagtccc 4325

Qy   4369 aagaggaattacaagagtactgcagacatcatgaaatcacctatgtggcccttgtctcgg 4428
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Db   4326 aagaggaattacaagagtactgcagacatcatgaaatcacctatgtggcccttgtctcgg 4385

Qy   4429 ataaagaaggaagccatgtcaaggttaagtctttcgagaaggaaaggcagacagagaagc 4488
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Qy   4549 atgaaaggaatggcagagaagcttccgataatcttgcagtgcaaaatctgaaggggtcat 4608
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Qy   4609 tttctaatgcttcaggtttgtttgaaatccatggagcaacagtggttcccattgtgagtg 4668
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Qy   4789 ctgtggatctacccaaagaaacaatattacagtttttatcattagagtgggatgctgatg 4848
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Qy   4849 aacaggcatttaacacaactgtgaagcagctgctgtcacgcctgccaaagcaaagatacc 4908
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Qy   4909 tcaaattagtctgtgatgaaatttataacatcaaagtagaaaaaaaggtgtctgtgctat 4968
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Db   4866 tcaaattagtctgtgatgaaatttataacatcaaagtagaaaaaaaggtgtctgtgctat 4925

Qy   4969 ttctgtacagctatagagatgactactacagaatcttatttttaaccctaaagaactgtcg 5028
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Db   4926 ttctgtacagctatagagatgactactacagaatcttatttttaaccctaaagaactgtcg 4985

Qy   5029 ttaacctcattcaaacagacagaggcttatactggaataatggaatgttgtacattcatc 5088
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Qy   5089 ataatttaaaattaaattctaagaagaggctgggtgcagtggctcacacctttaatccca 5148
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Qy   5149 gcactttgggaagccaaggcaggaagactgcttgaaaccaggagtttgagaccagcct 5206
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Db   5106 gcactttgggaagccaaggcaggaagactgcttgaaaccaggagtttgagaccagcct 5163
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RESULT 2
AAC77790
ID AAC77790 standard; cDNA; 2200 BP.
XX
AC AAC77790;
XX
DT 08-FEB-2001 (first entry)
XX
DE Human cancer associated gene sequence SEQ ID NO:184.
XX
KW Human; cancer associated gene; cancer antigen; detection; cancer;
KW diagnosis; cytostatic; proliferative; vulnerary; immunomodulator;
KW antidiabetic; antiasthmatic; antirheumatic; antiarthritic; antiviral;
KW antiinflammatory; antithyroid; antiallergic; antibacterial; cardiant;
KW dermatological; neuroprotective; thrombolytic; coagulant; nootropic;
KW vasotropic; antipsoriatic; antiangiogenic; gene therapy; inflammation;
KW immune disorder; haematopoietic cell disorder; autoimmune disorder;
KW allergic reaction; graft versus host disease; organ rejection;
KW haemostatic; thrombolytic; cardiovascular disorder; infection;
KW neurological disease; drug screening; ss.
XX
OS Homo sapiens.
XX
PN WO200055350-A1.
XX
PD 21-SEP-2000.
XX
PF 08-MAR-2000; 2000WO-US05882.
XX
PR 12-MAR-1999; 99US-0124270.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
DR WPI; 2000-587533/55.
DR P-PSDB; AAB43581.
XX
PT Novel isolated nucleic acids comprising sequences encoding peptides
PT useful for treating or diagnosing e.g. cancer -
XX
PS Claim 1; Page 761; 2352pp; English.
XX
CC AAC77607 to AAC78448 encode the human cancer associated proteins given
CC in AAB43398 to AAB44239. The proteins can have activities based on the
CC tissues and cells the genes are expressed in. Example of activities
CC include: cytostatic; proliferative; vulnerary; immunomodulator;
CC antidiabetic; antiasthmatic; antirheumatic; antiarthritic;
CC antiinflammatory; antithyroid; antiallergic; antibacterial; antiviral;
CC dermatological; neuroprotective; cardiant; thrombolytic; coagulant;
CC nootropic; vasotropic; antipsoriatic and antiangiogenic. The
CC polynucleotides and polypeptides can be used for preventing, treating or
CC ameliorating medical conditions and diagnosing pathological conditions.
CC Polynucleotides, polypeptides, antibodies, agonists and antagonists from
CC the present invention may be used to treat immune disorders by activating
CC or inhibiting the proliferation, differentiation or mobilisation of
CC immune cells, to treat disorders of haematopoietic cells, autoimmune
CC disorders, allergic reactions, graft versus host disease and organ
CC rejection, modulate haemostatic or thrombolytic activity, modulate
CC inflammation, cancers, cardiovascular disorders, neurological disease and
CC bacterial or viral infections. The peptides, nucleotides, antibodies,
CC agonists and antagonists may be also be used in drug screens. AAC78449 to

CC AAC78457 and AAB44240 represent sequences used in the exemplification of
CC the present invention.
XX
SQ Sequence 2200 BP; 676 A; 464 C; 495 G; 558 T; 7 other;

Query Match 35.9%; Score 1985; DB 21; Length 2200;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 2085; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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Qy   3206 cagcgacatactgaagggcaacttctcaatccgtacagccaagatgcagcagcatgtgtg 3265
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Qy   3266 tgaaaccatcatccgcatctttaaaagacatggagctgttcagttgtgtactccactact 3325
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Qy   3326 gcttccccgaaacagacaaatatatgagcacaacgaagctgccctattcatggaccacag 3385
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Qy   3386 cgggatgctggtgatgcttccttttgacctgcggatccctttttgcaagatatgtggcaag 3445
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Qy   3446 aaataatatattgaatttaaaacgatactgcatagaacgtgtgttcaggccgcgcaagtt 3505
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Qy   3626 tccagcacttcaggaaagaaattacagtatttatttgaaccataccatgttattgaaagc 3685
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Qy   3686 aatactcttacactgtgggatcccagaagataaactcagtcaagtctacattattctgta 3745
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Qy   3986 gttacaggtcttgatcaatttgggcttggtttacaaggtgcagcagcacaatggaatcat 4045
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Qy   4466 gaaggaaaggcagacagagaagcgtgtgctggagactgaacttgtggaccatgtactgca 4525
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1269 gaaggaaaggcagacagagaagcgtgtgctggagactgaacttgtggaccatgtactgca 1328

Qy   4526 gaaactgaggactaaagtcactgatgaaaggaatggcagagaagcttccgataatcttgc 4585
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   4586 agtgcaaaatctgaaggggtcattttctaatgcttcaggtttgtttgaaatccatggagc 4645
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   4646 aacagtggttcccattgtgagtgtgctagccccggagaagctgtcagccagcactaggag 4705
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Db   1689 acgcctgccaaagcaaagatacctcaaattagtctgtgatgaaatttataacatcaaagt 1748

Qy   4946 agaaaaaaaggtgtctgtgctatttctgtacagctatagagatgactactacagaatctt 5005
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1749 agaaaaaaaggtgtctgtgctatttctgtacagctatagagatgactactacagaatctt 1808

Qy   5006 attttaaccctaaagaactgtcgttaacctcattcaaacagacagaggcttatactggaa 5065
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1809 attttaaccctaaagaactgtcgttaacctcattcaaacagacagaggcttatactggaa 1868

Qy   5066 taatggaatgttgtacattcatcataatttaaaattaaattctaagaagaggctgggtgc 5125
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1869 taatggaatgttgtacattcatcataatttaaaattaaattctaagaagaggctgggtgc 1928

Qy   5126 agtggctcacaccttaatcccagcactttgggaagccaaggcaggaagactgcttgaaa 5185
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1929 agtggctcacaccttaatcccagcactttgggaagccaaggcaggaagactgcttgaaa 1988

Qy   5186 ccaggagtttgagaccagcctgagcaacaaagcaagaccccatctctataaaaactaaaa 5245
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1989 ccaggagtttgagaccagcctgagcaacaaagcaagaccccatctctataaaaactaaaa 2048
```

```
Qy   5246 aaattagttgggcatggtggcacatgcctgtagtcccagctactcca 5292
          ||||||||||||||||||||||||||||||||||||||||||||||
Db   2049 aaattagttgggcatggtggcacatgcctgtagtcccagctactcca 2095
```

RESULT 3
AAC76970
ID AAC76970 standard; cDNA; 2422 BP.
XX
AC AAC76970;
XX
DT 08-FEB-2001 (first entry)
XX
DE Human ORFX ORF2525 polynucleotide sequence SEQ ID NO:5049.
XX
KW Human; open reading frame; ORFX; detection; cytostatic; hepatotropic;
KW vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective;
KW anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant;
KW immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic;
KW hypotensive; dermatological; immunosuppressive; antiinflammatory;
KW antiviral; antibacterial; antifungal; antirheumatic; antithyroid;
KW antianaemic; gene therapy; cancer; proliferative disorder; hypertension;
KW neurodegenerative disorder; osteoarthritis; graft vs host disease;
KW cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
KW cholesterol ester storage; systemic lupus erythematosus; infection;
KW severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
KW allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
KW bone damage; cartilage damage; antiinflammatory disease; coagulation;
KW thrombosis; contraceptive; ss.
XX
OS Homo sapiens.
XX
PN WO200058473-A2.
XX
PD 05-OCT-2000.
XX
PF 31-MAR-2000; 2000WO-US08621.
XX
PR 31-MAR-1999; 99US-0127607.
PR 02-APR-1999; 99US-0127636.
PR 05-APR-1999; 99US-0127728.
PR 30-MAR-2000; 2000US-0540763.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Shimkets RA, Leach M;
XX
DR WPI; 2000-602362/57.
DR P-PSDB; AAB42761.
XX
PT Novel nucleic acids and peptides derived from open reading frame X,
PT useful for treating e.g. cancers, proliferative disorders,
PT neurodegenerative disorders and cardiovascular disease -
XX
PS Claim 5; Page 4233-4235; 5507pp; English.
XX
CC AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB43397,
CC which represent the human ORFX open reading frames 1 to 3161. The ORFX
CC sequences have activities such as: cytostatic; hepatotropic; vulnerary;
CC antipsoriatic; antiparkinsonian; nootropic; neuroprotective;
CC osteopathic; anticonvulsant; antiarthritic; immunosuppressant;
CC immunostimulant; cardiant; thrombolytic; coagulant; vasotropic;
CC antidiabetic; hypotensive; dermatological; immunosuppressive;
CC antiinflammatory; antibacterial; antiviral; antifungal; antirheumatic;
CC antithyroid; and antianaemic. The sequences can be used for determining
CC the presence of or predisposition to, or preventing or treating
CC pathological conditions associated with an ORFX-associated disorder. The
CC nucleic acids can be used to express ORFX proteins in gene therapy
CC vectors. The proteins and nucleic acids may be used to treat cancers,
CC proliferative disorders, neurodegenerative disorders, osteoarthritis,
CC graft vs host disease, cardiovascular disease, diabetes mellitus,
CC hypertension, hypothyroidism, cholesterol ester storage, systemic lupus
CC erythematosus, severe combined immunodeficiency (SCID), AIDS, viral,
CC bacterial or fungal infection, malaria, autoimmune disorders, asthma,
CC allergies, aplastic anaemia, burns, wounds, bone and cartilage damage,
CC nocturnal haemoglobinuria, antiinflammatory disease; to enhance
CC coagulation; to inhibit thrombosis; and as a contraceptive.
XX
SQ Sequence 2422 BP; 789 A; 489 C; 518 G; 619 T; 7 other;

Query Match 28.7%; Score 1585; DB 21; Length 2422;
Best Local Similarity 99.9%; Pred. No. 0;
Matches 1635; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy   3884 aaattcattaataaaacagaaaacaggtattgcacagttggtgaagtatggcttaaaaga 3943
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    732 aaattcattaataaaacagaaaacaggtattgcacagttggtgaagtatggcttaaaaga 791

Qy   3944 cctagaggaggttgttggactgttgaagaaactcggcatcaagttacaggtcttgatcaa 4003
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    792 cctagaggaggttgttggactgttgaagaaactcggcatcaagttacaggtcttgatcaa 851

Qy   4004 tttgggcttggtttacaaggtgcagcagcacaatggaatcatcttccagtttgtggcttt 4063
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    852 tttgggcttggtttacaaggtgcagcagcacaatggaatcatcttccagtttgtggcttt 911

Qy   4064 catcaaacgaaggcaaagggctgtacctgaaatcctcgcagctggaggcagatatgacct 4123
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    912 catcaaacgaaggcaaagggctgtacctgaaatcctcgcagctggaggcagatatgacct 971

Qy   4124 gctgattccccagtttagagggccacaagctctggggccagttcccactgccattggggt 4183
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    972 gctgattccccagtttagagggccacaagctctggggccagttcccactgccattggggt 1031

Qy   4184 cagcatagctatagacaagatatctgctgctgtcctcaacatggaggaatctgttacaat 4243
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1032 cagcatagctatagacaagatatctgctgctgtcctcaacatggaggaatctgttacaat 1091

Qy   4244 aagctcttgtgacctcctggttgtaagtgttggtcagatgtctatgtccagggccatcaa 4303
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1092 aagctcttgtgacctcctggttgtaagtgttggtcagatgtctatgtccagggccatcaa 1151

Qy   4304 cctaacccagaaactctggacagcaggcatcacagcagaaatcatgtacgactggtcaca 4363
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1152 cctaacccagaaactctggacagcaggcatcacagcagaaatcatgtacgactggtcaca 1211

Qy   4364 gtcccaagaggaattacaagagtactgcagacatcatgaaatcacctatgtggcccttgt 4423
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1212 gtcccaagaggaattacaagagtactgcagacatcatgaaatcacctatgtggcccttgt 1271

Qy   4424 ctcggataaagaaggaagccatgtcaaggttaagtctttcgagaaggaaaggcagacaga 4483
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1272 ctcggataaagaaggaagccatgtcaaggttaagtctttcgagaaggaaaggcagacaga 1331

Qy   4484 gaagcgtgtgctggagactgaacttgtggaccatgtactgcagaaactgaggactaaagt 4543
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1332 gaagcgtgtgctggagactgaacttgtggaccatgtactgcagaaactgaggactaaagt 1391

Qy   4544 cactgatgaaaggaatggcagagaagcttccgataatcttgcagtgcaaaatctgaaggg 4603
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1392 cactgatgaaaggaatggcagagaagcttccgataatcttgcagtgcaaaatctgaaggg 1451

Qy   4604 gtcattttctaatgcttcaggtttgtttgaaatccatggagcaacagtggttcccattgt 4663
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1452 gtcattttctaatgcttcaggtttgtttgaaatccatggagcaacagtggttcccattgt 1511

Qy   4664 gagtgtgctagccccggagaagctgtcagccagcactaggaggcgctatgaaactcaggt 4723
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1512 gagtgtgctagccccggagaagctgtcagccagcactaggaggcgctatgaaactcaggt 1571

Qy   4724 acaaactcgacttcagacctcccttgccaacttacatcagaaaagcagtgaaattgaaat 4783
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   1572 acaaactcgacttcagacctcccttgccaacttacatcagaaaagcagtgaaattgaaat 1631

Qy   4784 tctggctgtggatctacccaaagaaacaatattacagtttttatcattagagtgggatgc 4843
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Db    1632 tctggctgtggatctacccaaagaaacaatattacagtttttatcattagagtgggatgc 1691

Qy    4844 tgatgaacaggcatttaacacaactgtgaagcagctgctgtcacgcctgccaaagcaaag 4903
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1692 tgatgaacaggcatttaacacaactgtgaagcagctgctgtcacgcctgccaaagcaaag 1751

Qy    4904 atacctcaaattagtctgtgatgaaatttataacatcaaagtagaaaaaaaggtgtctgt 4963
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1752 atacctcaaattagtctgtgatgaaatttataacatcaaagtagaaaaaaaggtgtctgt 1811

Qy    4964 gctatttctgtacagctatagagatgactactacagaatcttatttttaaccctaaagaac 5023
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1812 gctatttctgtacagctatagagatgactactacagaatcttatttttaaccctaaagaac 1871

Qy    5024 tgtcgttaacctcattcaaacagacagaggcttatactggaataatggaatgttgtacat 5083
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1872 tgtcgttaacctcattcaaacagacagaggcttatactggaataatggaatgttgtacat 1931

Qy    5084 tcatcataatttaaaattaaattctaagaagaggctgggtgcagtggctcacacctttaa 5143
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1932 tcatcataatttaaaattaaattctaagaagaggctgggtgcagtggctcacacctttaa 1991

Qy    5144 tcccagcactttgggaagccaaggcaggaagactgcttgaaaccaggagtttgagaccag 5203
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    1992 tcccagcactttgggaagccaaggcaggaagactgcttgaaaccaggagtttgagaccag 2051

Qy    5204 cctgagcaacaaagcaagaccccatctctataaaaactaaaaaaattagttgggcatggt 5263
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2052 cctgagcaacaaagcaagaccccatctctataaaaactaaaaaaattagttgggcatggt 2111

Qy    5264 ggcacatgcctgtagtcccagctactccagaggctgagatggatcatctgagcctcagga 5323
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2112 ggcacatgcctgtagtcccagctactccagaggctgagatggatcatctgagcctcagga 2171

Qy    5324 ggttgaggctgcagtgagctgtgactgcgccactgcactccagtctgggacaacagagca 5383
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2172 ggttgaggctgcagtgagctgtgactgcgccactgcactccagtctgggacaacagagca 2231

Qy    5384 agaccctgtcttaaaaaaaaaaagaaaaaaaaattttttttctaagaagctgtcctacaa 5443
           |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||
Db    2232 agaccctgtcttaaaaaaaaaaagaaaaaaaaattttttttctaagaagctgtcctacaa 2291

Qy    5444 agttgagctttgttagtttttcatgtgtaatatattataaatttatcttttgggatataa 5503
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    2292 agttgagctttgttagtttttcatgtgtaatatattataaatttatcttttgggatataa 2351

Qy    5504 taaatgctttcatata 5519
           ||||||||||||||||
Db    2352 taaatgctttcatata 2367
```

RESULT 4
AAC77231
ID AAC77231 standard; cDNA; 405 BP.
XX
AC AAC77231;
XX
DT 08-FEB-2001 (first entry)
XX
DE Human ORFX ORF2786 polynucleotide sequence SEQ ID NO:5571.
XX
KW Human; open reading frame; ORFX; detection; cytostatic; hepatotropic;
KW vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective;
KW anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant;
KW immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic;
KW hypotensive; dermatological; immunosuppressive; antiinflammatory;
KW antiviral; antibacterial; antifungal; antirheumatic; antithyroid;
KW antianaemic; gene therapy; cancer; proliferative disorder; hypertension;
KW neurodegenerative disorder; osteoarthritis; graft vs host disease;
KW cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
KW cholesterol ester storage; systemic lupus erythematosus; infection;
KW severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
KW allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
KW bone damage; cartilage damage; antiinflammatory disease; coagulation;
KW thrombosis; contraceptive; ss.
XX
OS Homo sapiens.
XX
PN WO200058473-A2.
XX
PD 05-OCT-2000.
XX
PF 31-MAR-2000; 2000WO-US08621.
XX
PR 31-MAR-1999; 99US-0127607.
PR 02-APR-1999; 99US-0127636.
PR 05-APR-1999; 99US-0127728.
PR 30-MAR-2000; 2000US-0540763.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Shimkets RA, Leach M;
XX
DR WPI; 2000-602362/57.
DR P-PSDB; AAB43022.
XX
PT Novel nucleic acids and peptides derived from open reading frame X,
PT useful for treating e.g. cancers, proliferative disorders,
PT neurodegenerative disorders and cardiovascular disease -
XX
PS Claim 5; Page 4757; 5507pp; English.
XX
CC AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB43397,
CC which represent the human ORFX open reading frames 1 to 3161. The ORFX
CC sequences have activities such as: cytostatic; hepatotropic; vulnerary;
CC antipsoriatic; antiparkinsonian; nootropic; neuroprotective;
CC osteopathic; anticonvulsant; antiarthritic; immunosuppressant;
CC immunostimulant; cardiant; thrombolytic; coagulant; vasotropic;
CC antidiabetic; hypotensive; dermatological; immunosuppressive;
CC antiinflammatory; antibacterial; antiviral; antifungal; antirheumatic;
CC antithyroid; and antianaemic. The sequences can be used for determining
CC the presence of or predisposition to, or preventing or treating
CC pathological conditions associated with an ORFX-associated disorder. The
CC nucleic acids can be used to express ORFX proteins in gene therapy
CC vectors. The proteins and nucleic acids may be used to treat cancers,
CC proliferative disorders, neurodegenerative disorders, osteoarthritis,
CC graft vs host disease, cardiovascular disease, diabetes mellitus,
CC hypertension, hypothyroidism, cholesterol ester storage, systemic lupus
CC erythematosus, severe combined immunodeficiency (SCID), AIDS, viral,
CC bacterial or fungal infection, malaria, autoimmune disorders, asthma,
CC allergies, aplastic anaemia, burns, wounds, bone and cartilage damage,
CC nocturnal haemoglobinuria, antiinflammatory disease; to enhance
CC coagulation; to inhibit thrombosis; and as a contraceptive.
XX
SQ Sequence 405 BP; 97 A; 121 C; 107 G; 80 T; 0 other;

Query Match 6.4%; Score 354; DB 21; Length 405;
Best Local Similarity 100.0%; Pred. No. 5.5e-155;
Matches 354; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy    2823 aaccagaaagtggatctcttcagcctgggaattatcttctttgagatgtcctatcacccc 2882
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1 aaccagaaagtggatctcttcagcctgggaattatcttctttgagatgtcctatcacccc 60

Qy    2883 atggtcacggcttcagaaaggatctttgttctcaaccaactcagagatcccacttcgcct 2942
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      61 atggtcacggcttcagaaaggatctttgttctcaaccaactcagagatcccacttcgcct 120

Qy    2943 aagtttccagaagactttgacgatggagagcatgcaaagcagaaatcagtcatctcctgg 3002
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     121 aagtttccagaagactttgacgatggagagcatgcaaagcagaaatcagtcatctcctgg 180

Qy    3003 ctgttgaaccacgatccagcaaaacggcccacagccacagaactgctcaagagtgagctg 3062
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db    181 ctgttgaaccacgatccagcaaaacggcccacagccacagaactgctcaagagtgagctg 240

Qy   3063 ctgcccccaccccagatggaggagtcagagctgcatgaagtgctgcaccacacgctgacc 3122
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    241 ctgcccccaccccagatggaggagtcagagctgcatgaagtgctgcaccacacgctgacc 300

Qy   3123 aacgtggatgggaaggcctaccgcaccatgatggcccagatcttctcgcagcgc 3176
          ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    301 aacgtggatgggaaggcctaccgcaccatgatggcccagatcttctcgcagcgc 354


RESULT   5
AAA45838/c
ID   AAA45838 standard; cDNA; 260 BP.
XX
AC   AAA45838;
XX
DT   21-AUG-2000  (first entry)
XX
DE   Human secreted expressed sequence tag SEQ ID NO:2413.
XX
KW   Human; mouse; chicken; rat; secreted expressed sequence tag; sEST;
KW   expressed sequence tag; EST; probe; chemotactic; proliferative;
KW   immunomodulatory; haematopoietic; chemokinetic; analgesic; haemostatic;
KW   thrombolytic; antiinflammatory; cytostatic; antibacterial; antifungal;
KW   antiviral; antidiabetic; antiasthmatic; vulnerary; antiparkinsonian;
KW   antiulcer; osteopathic; neuroprotective; nootropic; antipsoriatic;
KW   cerebroprotective; anticonvulsant; antidepressant; gene therapy;
KW   vaccine; autoimmune disorder; multiple sclerosis; allergic condition;
KW   insulin dependent diabetes; asthma; myeloid cell deficiency; ulcer;
KW   lymphoid cell deficiency; burn; osteoporosis; osteoarthritis;
KW   central nervous system disorder; Alzheimer's disease; stroke;
KW   Parkinson's disease; Huntington's disease; coagulation disorder;
KW   haemophilia; thrombosis; inflammatory disorder; Crohn's disease;
KW   tumour; infection; depression; psoriasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200021991-A1.
XX
PD   20-APR-2000.
XX
PF   15-OCT-1999;   99WO-US24206.
XX
PR   15-OCT-1998;   98US-0104436.
XX
PA   (GEMY ) GENETICS INST INC.
XX
PI   Jacobs K,  McCoy JM,  LaVallie ER,  Collins-Racie LA,  Evans C;
PI   Merberg D,  Treacy M,  Bowman MR;
XX
DR   WPI; 2000-317938/27.
XX
PT   Isolated polynucleotides, and encoded proteins, comprising secreted
PT   expressed sequence tags (sESTs), useful for treating various disorders
PT   such as autoimmune, infectious, and central nervous system disorders -
XX
PS   Claim 1; Page 781; 803pp; English.
XX
CC   AAA43426 to AAA45925 represent specifically claimed secreted expressed
CC   sequence tags (sESTs), isolated from human, mouse, chicken and rat
CC   tissue sources. The sESTs can have a range of activities depending on
CC   the tissues they were isolated from. The activities include:
CC   chemotactic; proliferative; immunomodulatory; haematopoietic;
CC   chemokinetic; analgesic; haemostatic; thrombolytic; antiinflammatory;
CC   cytostatic; antibacterial; antifungal; antiviral; antidiabetic;
CC   antiasthmatic; vulnerary; antiulcer; osteopathic; neuroprotective;
CC   nootropic; antiparkinsonian; antipsoriatic; cerebroprotective;
CC   anticonvulsant; and antidepressant. The sESTs can be used for gene
CC   therapy and in vaccines. The sESTs are useful as probes for the
CC   identification and isolation of full-length cDNAs and genomic DNA
CC   molecules which correspond to the sESTs. Proteins encoded by the sESTs
CC   are useful in assays for determining biological activity and raising
CC   antibodies. They may be useful for treatment of autoimmune disorders
CC   (multiple sclerosis, insulin dependent diabetes), allergic conditions
CC   (asthma), myeloid or lymphoid cell deficiencies, wounds, burns, ulcers,
CC   osteoporosis, osteoarthritis, central nervous system disorders
CC   (Alzheimer's, Parkinson's, Huntington's disease, stroke), coagulation
CC   disorders (haemophilia, thrombosis), inflammatory disorders (Crohn's
CC   disease), tumours, bacterial, fungal or viral infections, depression and
CC   psoriasis. AAA45926 to AAA45931 represent linker variants which are given
CC   in the exemplification of the present invention.
XX
SQ   Sequence 260 BP; 52 A; 72 C; 57 G; 79 T; 0 other;


  Query Match             2.8%;  Score 152;  DB 21;  Length 260;
  Best Local Similarity   100.0%;  Pred. No. 8.8e-61;
  Matches  152;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    542 gctgttggaggccaagcggaaagaagagcaggagcaacgtgaaatcctgcatgagattca 601
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    177 GCTGTTGGAGGCCAAGCGGAAAGAAGAGCAGGAGCAACGTGAAATCCTGCATGAGATTCA 118

Qy    602 gagaaggaaagaagagataaaagaagagaaaaaaaggaaagaaatggctaagcaggaacg 661
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    117 GAGAAGGAAAGAAGAGATAAAAGAAGAGAAAAAAAGGAAAGAAATGGCTAAGCAGGAACG 58

Qy    662 tttggaaattgctagtttgtcaaaccaagatc 693
          |||||||||||||||||||||||||||||||
Db     57 TTTGGAAATTGCTAGTTTGTCAAACCAAGATC 26


RESULT   6
AAZ97408
ID   AAZ97408 standard; cDNA; 730 BP.
XX
AC   AAZ97408;
XX
DT   18-APR-2000  (first entry)
XX
DE   Human prostate cancer differentially expressed gene #269.
XX
KW   Prostate cancer specific gene; cancer; tumour progression; diagnose;
KW   hyperproliferative cell growth; prostatic disorder; treatment;
KW   metastatic prostate cancer; benign prostate hyperplasia; BPH; ss.
XX
OS   Homo sapiens.
XX
PN   WO9964594-A2.
XX
PD   16-DEC-1999.
XX
PF   10-JUN-1999;   99WO-US13181.
XX
PR   11-JUN-1998;   98US-0088877.
PR   09-JUN-1999;   99US-0088877.
XX
PA   (CHIR ) CHIRON CORP.
XX
PI   Astel JH,  Carroll E,  Endege WO,  Ford DM,  Monahan JE,  Schlegel R;
PI   Steinmann KE,  Zhang J;
XX
DR   WPI; 2000-116541/10.
XX
PT   New isolated prostate cancer specific nucleic acids, used to develop
PT   products for the diagnosis and treatment of cancer -
XX
PS   Claim 2; Page 183-184; 212pp; English.
XX
CC   This sequence represents a prostate cancer specific nucleic acid
CC   sequence. The invention relates to a method for diagnosing cancer,
CC   tumour progression, hyperproliferative cell growth or accompanying
CC   biological and physical manifestations. The method involves contacting
CC   the biological sample with a probe that comprises a sequence capable of
CC   hybridising to any of the 339 nucleotide sequences given in the
```

```
CC   specification (see AAZ97140-Z97478) and detecting duplex formation. The
CC   products and methods of the invention can be used for the diagnosis,
CC   prognosis, and treatment of cancer, tumour progression,
CC   hyperproliferative cell growth, and accompanying physical and biological
CC   manifestations. They can be used particularly for prostatic disorders
CC   such as metastatic prostate cancer, localised prostate cancer, or benign
CC   prostate hyperplasia (BPH).
XX
SQ   Sequence 730 BP; 223 A; 148 C; 167 G; 180 T; 12 other;


  Query Match             0.8%;  Score 45;  DB 21;  Length 730;
  Best Local Similarity   100.0%;  Pred. No. 7.1e-11;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   5246 aaattagttgggcatggtggcacatgcctgtagtcccagctactc 5290
         |||||||||||||||||||||||||||||||||||||||||||||
Db    335 aaattagttgggcatggtggcacatgcctgtagtcccagctactc 379


RESULT   7
AAZ97407
ID   AAZ97407 standard; cDNA; 745 BP.
XX
AC   AAZ97407;
XX
DT   18-APR-2000  (first entry)
XX
DE   Human prostate cancer differentially expressed gene #268.
XX
KW   Prostate cancer specific gene; cancer; tumour progression; diagnose;
KW   hyperproliferative cell growth; prostatic disorder; treatment;
KW   metastatic prostate cancer; benign prostate hyperplasia; BPH; ss.
XX
OS   Homo sapiens.
XX
PN   WO9964594-A2.
XX
PD   16-DEC-1999.
XX
PF   10-JUN-1999;   99WO-US13181.
XX
PR   11-JUN-1998;   98US-0088877.
PR   09-JUN-1999;   99US-0088877.
XX
PA   (CHIR ) CHIRON CORP.
XX
PI   Astel JH,  Carroll E,  Endege WO,  Ford DM,  Monahan JE,  Schlegel R;
PI   Steinmann KE,  Zhang J;
XX
DR   WPI; 2000-116541/10.
XX
PT   New isolated prostate cancer specific nucleic acids, used to develop
PT   products for the diagnosis and treatment of cancer -
XX
PS   Claim 2; Page 183; 212pp; English.
XX
CC   This sequence represents a prostate cancer specific nucleic acid
CC   sequence. The invention relates to a method for diagnosing cancer,
CC   tumour progression, hyperproliferative cell growth or accompanying
CC   biological and physical manifestations. The method involves contacting
CC   the biological sample with a probe that comprises a sequence capable of
CC   hybridising to any of the 339 nucleotide sequences given in the
CC   specification (see AAZ97140-Z97478) and detecting duplex formation. The
CC   products and methods of the invention can be used for the diagnosis,
CC   prognosis, and treatment of cancer, tumour progression,
CC   hyperproliferative cell growth, and accompanying physical and biological
CC   manifestations. They can be used particularly for prostatic disorders
CC   such as metastatic prostate cancer, localised prostate cancer, or benign
CC   prostate hyperplasia (BPH).
XX
SQ   Sequence 745 BP; 232 A; 148 C; 174 G; 180 T; 11 other;


  Query Match             0.8%;  Score 45;  DB 21;  Length 745;
  Best Local Similarity   100.0%;  Pred. No. 7.1e-11;
  Matches   45;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   5246 aaattagttgggcatggtggcacatgcctgtagtcccagctactc 5290
         |||||||||||||||||||||||||||||||||||||||||||||
Db    356 aaattagttgggcatggtggcacatgcctgtagtcccagctactc 400


RESULT   8
AAC25679/c
ID   AAC25679 standard; cDNA; 173 BP.
XX
AC   AAC25679;
XX
DT   06-OCT-2000  (first entry)
XX
DE   Human secreted protein 5' EST, SEQ ID NO: 29754.
XX
KW   Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
KW   gene therapy; chromosome mapping; ss.
XX
OS   Homo sapiens.
XX
PN   EP1033401-A2.
XX
PD   06-SEP-2000.
XX
PF   21-FEB-2000; 2000EP-0200610.
XX
PR   26-FEB-1999;   99US-0122487.
XX
PA   (GEST ) GENSET.
XX
PI   Dumas Milne Edwards J,  Duclert A,  Giordano J;
XX
DR   WPI; 2000-500381/45.
XX
PT   New nucleic acid that is a 5' expressed sequence tag (5' EST) for
PT   obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
PT   diagnostic, forensic, gene therapy and chromosome mapping procedures -
XX
PS   Claim 1; SEQ ID 29754; 71pp + CD-ROM; English.
XX
CC   The present sequence is one of a large number of 5' ESTs derived from
CC   mRNAs encoding secreted proteins. No ORF has yet been conclusively
CC   identified within the present sequence. The 5' ESTs were prepared from
CC   total human RNAs or polyA+ RNAs derived from 30 different tissues. EST
CC   sequences usually correspond mainly to the 3' untranslated region (UTR)
CC   of the mRNA because they are often obtained from oligo-dT primed cDNA
CC   libraries. Such ESTs are not well suited for isolating cDNA sequences
CC   derived from the 5' ends of mRNAs and even in those cases where longer
CC   cDNA sequences have been obtained, the full 5' UTR is rarely included.
CC   5' ESTs are derived from mRNAs with intact 5' ends and can therefore be
CC   used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used
CC   in diagnostic, forensic, gene therapy and chromosome mapping procedures.
CC   They are used to obtain upstream regulatory sequences and to design
CC   expression and secretion vectors.
XX
SQ   Sequence 173 BP; 37 A; 46 C; 39 G; 46 T; 5 other;


  Query Match             0.7%;  Score 41;  DB 21;  Length 173;
  Best Local Similarity   100.0%;  Pred. No. 5.2e-09;
  Matches   41;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   5325 gttgaggctgcagtgagctgtgactgcgccactgcactcca 5365
         |||||||||||||||||||||||||||||||||||||||||
Db     92 GTTGAGGCTGCAGTGAGCTGTGACTGCGCCACTGCACTCCA 52


RESULT   9
```

```
AAC79767
ID   AAC79767 standard; cDNA; 986 BP.
XX
AC   AAC79767;
XX
DT   12-FEB-2001  (first entry)
XX
DE   Human secreted protein gene 28 SEQ ID NO:38.
XX
KW   Human; secreted protein; diagnosis; antiarthritic; immunosuppressive;
KW   antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic;
KW   cerebroprotective; nootropic; neuroprotective; antibacterial; virucide;
KW   fungicide; ophthalmological; vulnerary; gene therapy; autoimmune disease;
KW   hyperproliferative disorder; cardiovascular disorder; angiogenesis;
KW   cerebrovascular disorder; nervous system disorder; infection;
KW   wound healing; food additive; preservative; skin aging; ss.
XX
OS   Homo sapiens.
XX
PN   WO200058494-A1.
XX
PD   05-OCT-2000.
XX
PF   23-MAR-2000; 2000WO-US07578.
XX
PR   26-MAR-1999;   99US-0126507.
PR   07-JAN-2000; 2000US-0174872.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM,  Komatsoulis G;
XX
DR   WPI; 2000-594644/56.
DR   P-PSDB; AAB44722.
XX
PT   New nucleic acid molecules encoding 50 human secreted proteins for
PT   diagnosing, preventing, treating or ameliorating medical conditions and
PT   used as food additives or preservatives -
XX
PS   Claim 1; Page 327; 371pp; English.
XX
CC   The polynucleotide sequences given in AAC79740 to AAC79789 encode the
CC   human secreted proteins given in AAB44695 to AAB44744. AAB44745 to
CC   AAB44760 represent human secreted polypeptide sequences and proteins
CC   homologous to them, which are given in the exemplification of the present
CC   invention. Human secreted proteins have activities based on the tissues
CC   and cells the genes are expressed in. Examples of activities include:
CC   antiarthritic; immunosuppressive; antirheumatic; antiproliferative;
CC   cytostatic; cardiant; vasotropic; cerebroprotective; nootropic;
CC   neuroprotective; antibacterial; virucide; fungicide; ophthalmological;
CC   and vulnerary. The polynucleotides and polypeptides can be used to
CC   prevent, treat or ameliorate a medical condition in e.g. humans, mice,
CC   rabbits, goats, horses, cats, dogs, chickens or sheep. They are also used
CC   in diagnosing a pathological condition or susceptibility to a
CC   pathological condition. Disorders which are diagnosed or treated include
CC   autoimmune diseases, hyperproliferative disorders, cardiovascular
CC   disorders, cerebrovascular disorders, angiogenesis, nervous system
CC   disorders, infections caused by bacteria, viruses and fungi and ocular
CC   disorders. The polypeptides can also be used to aid wound healing and
CC   epithelial cell proliferation, to prevent skin aging due to sunburn, to
CC   maintain organs before transplantation, for supporting cell culture of
CC   primary tissues, to regenerate tissues and in chemotaxis. The
CC   polypeptides can also be used as a food additive or preservative to
CC   increase or decrease storage capabilities, fat content, lipid, protein,
CC   carbohydrate, vitamins, minerals, cofactors and other nutritional
CC   components. AAC79731 to AAC79739 and AAB44694 represent sequences used in
CC   the exemplification of the present invention.
XX
SQ   Sequence 986 BP; 277 A; 225 C; 265 G; 219 T; 0 other;

  Query Match             0.7%;  Score 37;  DB 21;  Length 986;
  Best Local Similarity   100.0%;  Pred. No. 3.8e-07;
  Matches   37;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    5254 tgggcatggtggcacatgcctgtagtcccagctactc 5290
           |||||||||||||||||||||||||||||||||||||
Db     820 tgggcatggtggcacatgcctgtagtcccagctactc 856


RESULT  10
AAC05292/c
ID   AAC05292 standard; cDNA; 182 BP.
XX
AC   AAC05292;
XX
DT   06-OCT-2000  (first entry)
XX
DE   Human secreted protein 5' EST, SEQ ID NO: 9367.
XX
KW   Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
KW   gene therapy; chromosome mapping; ss.
XX
OS   Homo sapiens.
XX
PN   EP1033401-A2.
XX
PD   06-SEP-2000.
XX
PF   21-FEB-2000; 2000EP-0200610.
XX
PR   26-FEB-1999;   99US-0122487.
XX
PA   (GEST ) GENSET.
XX
PI   Dumas Milne Edwards J,  Duclert A,  Giordano J;
XX
DR   WPI; 2000-500381/45.
XX
PT   New nucleic acid that is a 5' expressed sequence tag (5' EST) for
PT   obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
PT   diagnostic, forensic, gene therapy and chromosome mapping procedures -
XX
PS   Claim 1; SEQ ID 9367; 71pp + CD-ROM; English.
XX
CC   The present sequence is one of a large number of 5' ESTs derived from
CC   mRNAs encoding secreted proteins. No ORF has yet been conclusively
CC   identified within the present sequence. The 5' ESTs were prepared from
CC   total human RNAs or polyA+ RNAs derived from 30 different tissues. EST
CC   sequences usually correspond mainly to the 3' untranslated region (UTR)
CC   of the mRNA because they are often obtained from oligo-dT primed cDNA
CC   libraries. Such ESTs are not well suited for isolating cDNA sequences
CC   derived from the 5' ends of mRNAs and even in those cases where longer
CC   cDNA sequences have been obtained, the full 5' UTR is rarely included.
CC   5' ESTs are derived from mRNAs with intact 5' ends and can therefore be
CC   used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used
CC   in diagnostic, forensic, gene therapy and chromosome mapping procedures.
CC   They are used to obtain upstream regulatory sequences and to design
CC   expression and secretion vectors.
XX
SQ   Sequence 182 BP; 29 A; 50 C; 41 G; 62 T; 0 other;

  Query Match             0.7%;  Score 36;  DB 21;  Length 182;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-06;
  Matches   36;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    5255 gggcatggtggcacatgcctgtagtcccagctactc 5290
           |||||||||||||||||||||||||||||||||||||
Db     158 GGGCATGGTGGCACATGCCTGTAGTCCCAGCTACTC 123


RESULT  11
AAA37105
ID   AAA37105 standard; cDNA; 1334 BP.
XX
```

AC AAA37105;
XX
DT 08-AUG-2000 (first entry)
XX
DE Human PRO1482 (UNQ751) cDNA sequence SEQ ID NO:301.
XX
KW Human; PRO polypeptide; membrane bound protein; receptor; diagnosis;
KW transmembrane; secretion; immunoadhesion; pharmaceutical; screening;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200012708-A2.
XX
PD 09-MAR-2000.
XX
PF 01-SEP-1999; 99WO-US20111.
XX
PR 01-SEP-1998; 98US-0098716.
PR 01-SEP-1998; 98US-0098749.
PR 01-SEP-1998; 98US-0098750.
PR 02-SEP-1998; 98US-0098803.
PR 02-SEP-1998; 98US-0098821.
PR 02-SEP-1998; 98US-0098843.
PR 09-SEP-1998; 98US-0099536.
PR 09-SEP-1998; 98US-0099596.
PR 09-SEP-1998; 98US-0099598.
PR 09-SEP-1998; 98US-0099602.
PR 09-SEP-1998; 98US-0099642.
PR 10-SEP-1998; 98US-0099741.
PR 10-SEP-1998; 98US-0099754.
PR 10-SEP-1998; 98US-0099763.
PR 10-SEP-1998; 98US-0099792.
PR 10-SEP-1998; 98US-0099808.
PR 10-SEP-1998; 98US-0099812.
PR 10-SEP-1998; 98US-0099815.
PR 10-SEP-1998; 98US-0099816.
PR 15-SEP-1998; 98US-0100385.
PR 15-SEP-1998; 98US-0100388.
PR 15-SEP-1998; 98US-0100390.
PR 16-SEP-1998; 98US-0100584.
PR 16-SEP-1998; 98US-0100627.
PR 16-SEP-1998; 98US-0100661.
PR 16-SEP-1998; 98US-0100662.
PR 16-SEP-1998; 98US-0100664.
PR 17-SEP-1998; 98US-0100683.
PR 17-SEP-1998; 98US-0100684.
PR 17-SEP-1998; 98US-0100710.
PR 17-SEP-1998; 98US-0100711.
PR 17-SEP-1998; 98US-0100919.
PR 17-SEP-1998; 98US-0100930.
PR 18-SEP-1998; 98US-0100848.
PR 18-SEP-1998; 98US-0100849.
PR 18-SEP-1998; 98US-0101014.
PR 18-SEP-1998; 98US-0101068.
PR 18-SEP-1998; 98US-0101071.
PR 22-SEP-1998; 98US-0101279.
PR 23-SEP-1998; 98US-0101471.
PR 23-SEP-1998; 98US-0101472.
PR 23-SEP-1998; 98US-0101474.
PR 23-SEP-1998; 98US-0101475.
PR 23-SEP-1998; 98US-0101476.
PR 23-SEP-1998; 98US-0101477.
PR 23-SEP-1998; 98US-0101479.
PR 24-SEP-1998; 98US-0101738.
PR 24-SEP-1998; 98US-0101741.
PR 24-SEP-1998; 98US-0101743.
PR 24-SEP-1998; 98US-0101915.
PR 24-SEP-1998; 98US-0101916.
PR 29-SEP-1998; 98US-0102207.
PR 29-SEP-1998; 98US-0102240.
PR 29-SEP-1998; 98US-0102307.
PR 29-SEP-1998; 98US-0102330.
PR 29-SEP-1998; 98US-0102331.
PR 30-SEP-1998; 98US-0102484.
PR 30-SEP-1998; 98US-0102487.
PR 30-SEP-1998; 98US-0102570.
PR 30-SEP-1998; 98US-0102571.
PR 01-OCT-1998; 98US-0102684.
PR 01-OCT-1998; 98US-0102687.
PR 02-OCT-1998; 98US-0102965.
PR 06-OCT-1998; 98US-0103258.
PR 06-OCT-1998; 98US-0103449.
PR 07-OCT-1998; 98US-0103314.
PR 07-OCT-1998; 98US-0103315.
PR 07-OCT-1998; 98US-0103328.
PR 07-OCT-1998; 98US-0103395.
PR 07-OCT-1998; 98US-0103396.
PR 07-OCT-1998; 98US-0103401.
PR 08-OCT-1998; 98US-0103633.
PR 08-OCT-1998; 98US-0103678.
PR 08-OCT-1998; 98US-0103679.
PR 08-OCT-1998; 98US-0103711.
PR 14-OCT-1998; 98US-0104257.
PR 20-OCT-1998; 98US-0104987.
PR 20-OCT-1998; 98US-0105000.
PR 20-OCT-1998; 98US-0105002.
PR 21-OCT-1998; 98US-0105104.
PR 22-OCT-1998; 98US-0105169.
PR 22-OCT-1998; 98US-0105266.
PR 26-OCT-1998; 98US-0105693.
PR 26-OCT-1998; 98US-0105694.
PR 27-OCT-1998; 98US-0105807.
PR 27-OCT-1998; 98US-0105881.
PR 27-OCT-1998; 98US-0105882.
PR 27-OCT-1998; 98US-0106062.
PR 28-OCT-1998; 98US-0106023.
PR 28-OCT-1998; 98US-0106029.
PR 28-OCT-1998; 98US-0106030.
PR 28-OCT-1998; 98US-0106032.
PR 28-OCT-1998; 98US-0106033.
PR 28-OCT-1998; 98US-0106178.
PR 29-OCT-1998; 98US-0106248.
PR 29-OCT-1998; 98US-0106384.
PR 29-OCT-1998; 98US-0108500.
PR 30-OCT-1998; 98US-0106464.
PR 03-NOV-1998; 98US-0106856.
PR 03-NOV-1998; 98US-0106902.
PR 03-NOV-1998; 98US-0106905.
PR 03-NOV-1998; 98US-0106919.
PR 03-NOV-1998; 98US-0106932.
PR 03-NOV-1998; 98US-0106934.
PR 10-NOV-1998; 98US-0107783.
PR 17-NOV-1998; 98US-0108775.
PR 17-NOV-1998; 98US-0108779.
PR 17-NOV-1998; 98US-0108787.
PR 17-NOV-1998; 98US-0108788.
PR 17-NOV-1998; 98US-0108801.
PR 17-NOV-1998; 98US-0108802.
PR 17-NOV-1998; 98US-0108806.
PR 17-NOV-1998; 98US-0108807.
PR 17-NOV-1998; 98US-0108867.
PR 17-NOV-1998; 98US-0108925.
PR 18-NOV-1998; 98US-0108848.
PR 18-NOV-1998; 98US-0108849.
PR 18-NOV-1998; 98US-0108850.
PR 18-NOV-1998; 98US-0108851.
PR 18-NOV-1998; 98US-0108852.
PR 18-NOV-1998; 98US-0108858.
PR 18-NOV-1998; 98US-0108904.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker K, Goddard A, Gurney AL, Smith V, Watanabe CK, Wood WI;
XX
DR WPI; 2000-237871/20.

DR P-PSDB; AAY99423.
XX
PT New mammalian DNA sequences encoding transmembrane, receptor or
PT secreted PRO polypeptides, useful for screening of potential peptide or
PT small molecule inhibitors of the relevant receptor/ligand interactions
XX
PS Claim 2; Fig 167; 773pp; English.
XX
CC AAA37022 to AAA37144 encode the new isolated human transmembrane,
CC receptor or secreted PRO polypeptides given in AAY99340 to AAY99462. The
CC transmembrane and receptor PRO proteins can be used for screening of
CC potential peptide or small molecule inhibitors of the relevant
CC receptor/ligand interactions. The polypeptides and nucleotide sequences
CC encoding then have various industrial applications, including uses as
CC pharmaceutical and diagnostic agents. AAA37145 to AAA37330 represent
CC PCR primers and hybridisation probes used in the isolation of the PRO
CC polypeptides from the present invention.
XX
SQ Sequence 1334 BP; 299 A; 309 C; 336 G; 390 T; 0 other;

Query Match 0.7%; Score 36; DB 21; Length 1334;
Best Local Similarity 100.0%; Pred. No. 1.1e-06;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5254 tgggcatggtggcacatgcctgtagtcccagctact 5289
||||||||||||||||||||||||||||||||||||
Db 1177 tgggcatggtggcacatgcctgtagtcccagctact 1212

RESULT 12
AAF54417
ID AAF54417 standard; DNA; 1334 BP.
XX
AC AAF54417;
XX
DT 02-APR-2001 (first entry)
XX
DE Primer #90 used in the identification of proteins.
XX
KW Secreted; transmembrane; gene therapy; ss.
XX
OS Unidentified.
XX
PN WO200078961-A1.
XX
PD 28-DEC-2000.
XX
PF 18-FEB-2000; 2000WO-US04342.
XX
PR 23-JUN-1999; 99US-0141037.
PR 20-JUL-1999; 99US-0144758.
PR 26-JUL-1999; 99US-0145698.
PR 01-SEP-1999; 99WO-US20111.
PR 29-OCT-1999; 99US-0162506.
PR 30-NOV-1999; 99WO-US28313.
PR 02-DEC-1999; 99WO-US28551.
PR 16-DEC-1999; 99WO-US30095.
PR 05-JAN-2000; 2000WO-US00219.
PR 06-JAN-2000; 2000WO-US00376.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S;
PI Gao W, Goddard A, Godowski PJ, Grimaldi CJ, Gurney AL, Hillan KJ;
PI Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D;
PI Watanabe CK, Williams PM, Wood WI;
XX
DR WPI; 2001-071395/08.
XX
PT Secreted and transmembrane proteins and nucleic acids designated PRO,
PT useful as hybridization probes, in chromosome and gene mapping and gene
PT therapy -
XX
PS Example 86; Page 459; 787pp; English.
XX
CC The present invention relates to secreted and transmembrane proteins.
CC These proteins and the DNA encoding them may be used as hybridization
CC probes, in chromosome and gene mapping and in the generation of
CC anti-sense RNA and DNA. They may also be used used to generate either
CC transgenic animals or knockout animals which are in turn useful for
CC development and screening of therapeutically useful reagents.
CC The nucleic acids may also be used in gene therapy.
XX
SQ Sequence 1334 BP; 299 A; 309 C; 336 G; 390 T; 0 other;

Query Match 0.7%; Score 36; DB 22; Length 1334;
Best Local Similarity 100.0%; Pred. No. 1.1e-06;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 5254 tgggcatggtggcacatgcctgtagtcccagctact 5289
||||||||||||||||||||||||||||||||||||
Db 1177 tgggcatggtggcacatgcctgtagtcccagctact 1212

RESULT 13
AAC59429/c
ID AAC59429 standard; cDNA; 2764 BP.
XX
AC AAC59429;
XX
DT 02-FEB-2001 (first entry)
XX
DE Human secreted protein cDNA #38.
XX
KW Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW neurological disease; infection; human; secreted protein; ss.
XX
OS Homo sapiens.
XX
PN WO200056765-A1.
XX
PD 28-SEP-2000.
XX
PF 16-MAR-2000; 2000WO-US06823.
XX
PR 19-MAR-1999; 99US-0125364.
PR 08-DEC-1999; 99US-0169623.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM, Komatsoulis G;
XX
DR WPI; 2000-602215/57.
DR P-PSDB; AAB33997.
XX
PT Nucleic acid molecules encoding human secreted proteins, used in
PT preventing, treating or ameliorating a disorder, e.g. Alzheimer's and
PT Parkinson's diseases and cancers -
XX
PS Claim 1; Page 351-352; 410pp; English.
XX
CC The invention relates to the isolation of genes AAC59392-C59439 encoding
CC 48 human secreted proteins AAB33963-B34006. The genes can be used to
CC generate fusion proteins by linking to the gene for the human
CC immunoglobulin G Fc portion (SEQID1) for increasing the stability of
CC the fusion protein as compared to the human protein only. The genes and
CC proteins are useful for preventing, ameliorating or treating medical
CC conditions, e.g. by protein or gene therapy. The genes are isolated
CC from a range of human tissues disclosed in the specification. The
CC nucleic acids, proteins, antibodies and (ant)agonists are useful in
CC the diagnosis, treatment and prevention of: (a) cancer, e.g. breast

```
CC   and ovarian cancer, and other cancers of the adrenal gland, bone, bone
CC   marrow, breast, gastrointestinal tract, liver, lung, or urogenital;
CC   (b) immune disorders e.g. Addison's disease, allergies, autoimmune
CC   haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's
CC   disease, multiple sclerosis, rheumatoid arthritis and ulcerative
CC   colitis; (c) cardiovascular disorders such as myocardial ischaemias; (d)
CC   wound healing; (e) neurological diseases e.g. cerebral anoxia and
CC   epilepsy; and (f) infectious diseases such as viral, bacterial, fungal
CC   and parasitic infections.
XX
SQ   Sequence 2764 BP; 688 A; 672 C; 673 G; 731 T; 0 other;


  Query Match             0.7%;  Score 36;  DB 21;  Length 2764;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-06;
  Matches   36;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   5254 tgggcatggtggcacatgcctgtagtcccagctact 5289
         ||||||||||||||||||||||||||||||||||||
Db   1523 TGGGCATGGTGGCACATGCCTGTAGTCCCAGCTACT 1488


RESULT  14
AAA38099/c
ID   AAA38099 standard; DNA; 5490 BP.
XX
AC   AAA38099;
XX
DT   24-AUG-2000  (first entry)
XX
DE   Human genomic DNA fragment containing the atpb2 gene.
XX
KW   Na/K-ATPase beta2 subunit; atpb2; p53; polymorphism; lose heterozygosity;
KW   detect gene deletion; cancer; tumour; ds.
XX
OS   Homo sapiens.
XX
PN   JP2000093185-A.
XX
PD   04-APR-2000.
XX
PF   25-SEP-1998;   98JP-0288796.
XX
PR   25-SEP-1998;   98JP-0288796.
XX
PA   (KOKU-) KOKURITSU GAN CENT SOCHO.
PA   (BMLB-) BML KK.
XX
DR   WPI; 2000-342477/30.
XX
PT   Detection of pathogenic gene deletion to assess the correlation between
PT   tumour cellularity and disappearance of heterozygosity, useful in
PT   predicting a cancerous genotype -
XX
PS   Claim 3; Fig 1; 20pp; Japanese.
XX
CC   This sequence represents a fragment of human genomic DNA, containing the
CC   Na/K-ATPase beta2 subunit gene (atpb2). The fragment is used in a method
CC   for the detection of gene deletion in a gene sample-derived cell by
CC   detecting the disappearance of heterozygosity in a gene polymorphism
CC   marker. The invention relates to detection of gene deletion in relation
CC   to the disappearance of heterozygosity in a gene polymorphism marker in
CC   the atpb2 gene present downstream of the p53 gene in the sample, and
CC   relates more preferably to a gene polymorphism marker in the p53 gene.
CC   The method is used for the detection of pathogenic gene deletion
CC   especially that related to induction of a cancerous state.
XX
SQ   Sequence 5490 BP; 1065 A; 1626 C; 1457 G; 1342 T; 0 other;


  Query Match             0.7%;  Score 36;  DB 21;  Length 5490;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-06;
  Matches   36;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   5255 gggcatggtggcacatgcctgtagtcccagctactc 5290
         ||||||||||||||||||||||||||||||||||||
Db   5364 GGGCATGGTGGCACATGCCTGTAGTCCCAGCTACTC 5329


RESULT  15
AAX89439/c
ID   AAX89439 standard; DNA; 7680 BP.
XX
AC   AAX89439;
XX
DT   15-FEB-2000  (first entry)
XX
DE   14-3-3 sigma transcription regulatory region.
XX
KW   14-3-3 sigma; HME1; stratifin; p53; diagnosis; cancer; psoriasis; polyp;
KW   psoriasis; wart; inflammatory disease; proliferation; ss;
KW   transcription regulatory region.
XX
OS   Homo sapiens.
XX
PN   WO9931240-A2.
XX
PD   24-JUN-1999.
XX
PF   18-DEC-1998;   98WO-US26924.
XX
PR   18-DEC-1997;   97US-0069416.
PR   15-DEC-1998;   98US-0210748.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Hermeking H,  Vogelstein B,  Kinzler KW;
XX
DR   WPI; 2000-022907/02.
XX
PT   Use of 14-3-3 sigma polypeptides and nucleic acids for the diagnosis or
PT   treatment of cancer -
XX
PS   Claim 52; Page 68-71; 73pp; English.
XX
CC   This is the 14-3-3 sigma transcriptional regulatory region nucleotide
CC   sequence. 14-3-3 sigma is a member of the 14-3-3 protein family and is
CC   also known as HME1 or stratifin. 14-3-3 sigma expression is regulated by
CC   p53 and exogenous expression of 14-3-3 sigma results in G2 block. The
CC   14-3-3 sigma nucleotide and amino acid sequences are used in the
CC   invention to develop agents for the diagnosis, susceptibility
CC   determination and treatment of cancer. The amino acid sequence can be
CC   used in method for suppressing the growth of tumour cells. The 14-3-3
CC   sigma polypeptides can mediate cell cycle arrest upon damage to cellular
CC   DNA. 14-3-3 sigma probes can be used for diagnosing, testing
CC   susceptibility to or treating cancers and identifying agents for treating
CC   cancers. They can also be used to treat other proliferative diseases,
CC   e.g. psoriasis, polyps, warts, and inflammatory diseases. The 14-3-3
CC   sigma antisense oligonucleotides can be used for promoting the
CC   proliferation and growth of cells.
XX
SQ   Sequence 7680 BP; 1798 A; 2053 C; 2000 G; 1829 T; 0 other;


  Query Match             0.7%;  Score 36;  DB 21;  Length 7680;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-06;
  Matches   36;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   5255 gggcatggtggcacatgcctgtagtcccagctactc 5290
         ||||||||||||||||||||||||||||||||||||
Db   6110 GGGCATGGTGGCACATGCCTGTAGTCCCAGCTACTC 6075


Search completed: October 21, 2001, 23:16:55
Job time: 12246 sec
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